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**Education Reform:
In Attempting To Achieve Systemic Reform,
Are We On Track Or Off Course?**

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ABSTRACT

If our schools, especially the K-12 segment, are not adequately preparing our youth to meet the challenges of a 21st century workplace, what is being done to correct the problem? This paper examines the strategic view of major stakeholders from Government, Education and related professional associations, and Business interests.

First a comparison is made to determine if there is (relatively) common ground in the area of strategic vision. Some issues of concern to stakeholders are highlighted. Finally, areas and programs which are making real progress toward improvement are discussed. The author's conclusions about the educational reform effort are then offered.

I. EXECUTIVE SUMMARY

The existing educational system is not adequately preparing tomorrow's workforce. Human Resources are a significant component of any business or industrial enterprise. Educational achievement for this component of national industrial power substantially influences our nation's ability to compete successfully in an increasingly demanding and technically evolving marketplace.

Educational reform has been an issue in the spotlight since the release of A Nation at Risk in 1983 (Gardner, et.al., 1983). Since then, many reports and commissions re-identified the problem, but offered no workable, systemwide solution. As we approach the 21st century, our leaders in government, education and business are being driven toward achieving the "Critical Mass" needed to produce meaningful, nationwide reform of our educational system.

This report examines strategic objectives of several major stakeholders proposing systemic reform for our system of public education. Efforts toward achieving reform are discussed. Some successful efforts are highlighted. Business -- Education Partnerships and State -- Local reform efforts seem to have gained the most ground. While progress is being made, much about nationwide reform of our educational system remains controversial, unclear and undone. One thing is clear:

There is no silver bullet which will provide a simple, quick, inexpensive or single answer solution to the multifaceted challenge of systemic educational reform.

II. INTRODUCTION

If our schools, especially the K-12 segment, are not adequately preparing our youth to meet the challenges of a 21st century workplace, what is being done to correct the problem? This paper examines the strategic view of major stakeholders from Government, Education and related professional associations, and Business interests.

First a comparison is made to determine if there is (relatively) common ground in the area of strategic vision. Some issues of concern to stakeholders are highlighted. Finally, areas and programs which are making real progress toward improvement are discussed. This author's conclusions about the educational reform effort are then offered.

Current criticism of our public schools includes comments such as *Students are not learning enough* or *Students are not taught what they need to know* (Richard Riley, Feb 3, 1994) in order to:

- 1 *Advance to the next level¹ without remedial instruction, or*
- 2 *Enter the work force ready and prepared to learn high tech skills in an increasingly technical workplace.*

¹ The next grade, the next higher school, eg elementary from kindergarten, middle from elementary, high school from middle or post secondary from high school.

The future security of the United States of America, like that of any nation, is substantially and inextricably linked to its national economic strength. National and individual prosperity are logical outcomes of a strong and growing national economy. In a world class marketplace, the skills and abilities of individual workers, in the aggregate, become a significant factor.

The linkage between industrial competitiveness and a nation's educational system is both apparent and undeniable. (Taylor 1991)

A nation's educational system provides the foundation upon which rests the bricks and mortar of entrants into: the workforce, vocational and technical training programs, and higher (post-secondary) education. *Individual and, in a cumulative sense, national productivity (or lack thereof) is a natural byproduct of the nation's educational system.*

Some would argue that little has changed since the report A Nation at Risk was released in 1983. Others would say that we are making some progress and need little or no additional outside (non-local) intervention. *What is clear, however, is that a problem still exists. There exists a growing sense of uneasiness with the current educational system. The idea that we at least need to improve all our schools, if not restructure the entire system of education, is receiving increasing and widespread acceptance.*
(Shanker, Sep 1993)

America 2000, An Education Strategy, suggests that we must develop school systems² that consistently provide educational programs which meet or exceed world class standards. Such programs must include a strategy that enables the vast majority of participating students to reach levels of academic achievement significantly beyond today's levels. (U.S. Department of Education, [USDE] 1991, 20-28) Many parties (stakeholders) have a legitimate interest in educational reform. Included among these are Governments (Federal, State and Local), Business and Industry, Educators (In our schools and Universities, as Individuals and through Professional organizations), Parents and Students.

There is substantial consensus on the need for nationwide educational reform. The challenge of strategic and structural reform of our educational system is being undertaken in earnest. Recent participants in reform³ efforts include Federal and State governments, local governments and related school districts, parents, business and industry, and various other interest groups.⁴ In order to ensure that students learn what they need to know to advance to the next level of education or to enter the workforce, reform efforts must address many complex issues, some obvious, some less so -- but no less important to the process.

² Absent a change to the U.S. Constitution, education will remain an issue which is the domain of individual states and, by extension, their individual school districts.

³ As it applies to our public school systems in the K - 12 years.

⁴ National Education Association, Council of Governors, National Alliance of Business, National Teachers Association, etc.

Educational reform issues include, but are not limited to:

- * *What goals are appropriate for education in the U.S.A.?*
- * *What should the standards for learning be?*
- * *Who determines what the standards for learning are? How do we determine if the standards have been met?*
- * *How should the reform effort, as it relates to current criticism and the above issues, be undertaken?*

In addressing the preceding issues, several additional areas must necessarily be considered:

- * *What assumptions underlie reform goals and strategies?*
- * *Who are the stakeholders in the issue?*
- * *Who is now and who should be involved in the process?*
- * *What should their role(s) be?*
- * *Do present efforts appropriately address the issues?*
- * *Are goals achievable?*

In considering reform from the perspective of various stakeholders, I examine leadership initiatives at the Federal, State and Local Levels, of Educators, as well as involvement by Business and Industry whether as individual firms or as Business and Industry associations.

Questions addressed include:

- * *How do the Strategic Visions, goals and concerns enumerated by Federal, State and Local, governments, Educators and their associations, and Business - Industry compare?*
- * *Where is significant progress being made?*
- * *Are we "On target or off course?"*

III. ASSUMPTIONS UNDERLYING REFORM GOALS AND STRATEGIES

A common tenet underlying the Strategic Goals reviewed is that America's future prosperity depends on the ability to compete in a global marketplace that is "World Class" across the spectrum of those factors which determine competitiveness. The ability to provide "World Class" Goods and Services, at competitive prices, requires a "World Class Workforce." These individuals must be skilled and able to use today's technology well.

They must also be able to adapt and quickly learn to use future technology improvements. (Taylor, 1991) Such a workforce requires competent entry level personnel. Such competency includes literacy, an understanding of mathematics and basic statistics, computer skills such as keyboarding and data entry, and a basic understanding of how and why businesses compete and succeed.

Complicating the problem is the demographic reality that those persons least well served by today's schools⁵ will increasingly form the majority of our public school and entry level work force populations. (Hudson Institute [for the U.S. Dept. of Labor], 1987, Fullerton, Nov 1993) Future demographic trends must be an important consideration in developing any long range improvement program. Given the preceding assumptions, let's consider who the stakeholders are in dealing with systemic educational reform.

⁵ Minorities including women, blacks, hispanics, urban poor, etc.

IV. STAKEHOLDER FRAMEWORK

Opinions differ widely about who should be involved in and what are appropriate roles for the various players involved in restructuring the educational process. In discussing reform within the U.S. public school system, a reasonable analysis will include identification of stakeholders. I used this framework to identify suppliers, products and customers (stakeholders) in the process.

Phase	Desired Product	Supplier	Customer
Pre-School & Kindergarten	Student ready to Learn	Parents, Government Programs (Head Start, WIC, etc.)	Elementary Schools, Taxpayers
Grades 1-12	Student with skills and knowledge necessary to succeed at next level (through grade 12)	Parents, Educators from prior years School Boards, State Boards of Education	Next Grade Teachers Parents, Taxpayers, Some businesses
Entry level Work Post secondary Education	High School Graduate with skills needed to perform tasks required in an increasingly technical workplace or at college or technical school level	Parents, Educators, School Boards via graduation standards, State Boards of Education	Parents, Taxpayers, Higher Education Systems Business and Industry

The product is the person being or to be educated. The individual student is an intermediate (unfinished) product during school years. At school measurement points such as kindergarten to elementary, elementary to middle, etc., the student may be thought of as a sub-assembly, finished but not yet complete. Other measurement points include completion of required competency exams before progressing to the next grade, or graduating. But, who decides what the finished product should be? Who defines and manages the process to insure a quality product is the outcome? Do these stakeholders have a "Shared Vision" of Education Reform?

V. *POSITIONS TAKEN BY THE FOUR MAJOR STAKEHOLDERS*

A. *Leadership at the Federal level:* The Bush administration submitted two related reports, America 2000 and Workforce 2000. The first of these, America 2000, calls for correction of systemic educational problems. The second, Workforce 2000, identifies skills necessary for success in the workplace of the future and discusses demographic trends for the constituency of the future workforce. Both reports called for significant change in the educational process.

The Clinton Administration used America 2000 as a basis for improvement and submitted legislation titled *Goals 2000: The Educate America Act*. This legislation also calls for swift and decisive change in the educational system. The two programs are similar in many respects. They share the same six National Education Goals established in 1990 by President Bush and the nation's Council of Governors:⁶ *BY THE YEAR 2000...*

- 1 *All children in America will start school ready to learn.*
- 2 *The high school graduation rate will increase to at least 90 percent.*
- 3 *American students will be competent in core academic subjects.*
- 4 *U.S. students will be first in the world in science and mathematics achievement.*
- 5 *Every adult American will be literate and possess the skills necessary to compete in a global economy.*
- 6 *Every school in America will be safe, disciplined and drug free.*

⁶ While this section is titled "Leadership at the Federal Level, The nation's governors were major participants in the development of the six national goals for education.

Additional Highlights of the Goals 2000 bill include:

TITLE I: Statutorily establishes the National Education Goals established in 1990, with some modifications.

TITLE II: Establishes:

A National Education Goals Panel with expanded membership

A National Education Standards and Improvement Council

Grants to develop Voluntary National Opportunity-to-Learn Standards

TITLE III: Authorizes formula grants to States to support development and implementation of systemic reform plans.

TITLE IV: Establishes a National Skills Standards Board

All six objectives of the Goals 2000: Educate America Act are listed for the sake of completeness. I focus on areas 2, 3, and 4 as they relate to student's academic improvement. Special attention is given to area 3 and the issue of national standards.

All six are praiseworthy objectives. But, as Ross Perot so often pointed out in various political debates, "The devil is in the details." Deciding what we want to achieve is less difficult than devising a strategy for getting there. Politics being "the art of the possible," Federal leadership must be guided by the historical role of the Federal government in public education in determining how to influence systemic educational reform.

The January 1994 issue of the Congressional digest provides some interesting and relevant commentary about the GOALS 2000 bill.

"Historically, the Federal government's role in education has been secondary to that of State and Local jurisdictions."

"Goals 2000 codifies into law the national education goals devised by then president Bush and the nation's governors; encourages the development of voluntary national standards for academic performance and school services; and provides for the establishment of skills standards for today's workforce."

"Proponents of the bill believe that sustained improvement in American education is not possible without systemwide reform, including standards for evaluating the progress or failure, of individual students or schools. They maintain that Goals 2000 gives local jurisdictions broad flexibility in designing and implementing programs to meet their specific needs. They also assert that the legislation would promote equal access to quality education, since all children would be affected."

The comments above, and other literature discussing the administration position includes strong indicators that the Federal role is properly one of leadership while the work in the trenches must be done at the State and Local level.

Goals 2000 provides grants to assist with the reform effort. The bill contains specific assurances that participation in national certification and standards issues are voluntary and are in no way linked to ability to participate in other federally funded education programs. Goals 2000 makes funds available to all schools which submit and receive approval of improvement plans.

B. Leadership and strategic vision from the Educators': The National Education Association (NEA), one of the primary organization representing educators across the nation, has listed nine overarching principles related to educational reform. These principles, listed below, are contained in an NEA document, "An open letter to America on Schools, Students, and Tomorrow."

ONE: Students must master what is taught.

TWO: Students must be active participants in learning.

THREE: Full learning opportunity must be available for all students.

FOUR: Learning should occur throughout life.

FIVE: Authority must be vested in the local school faculty.

SIX: School staff must be professionally compensated.

SEVEN: There must be high standards for teacher preparation and practice.

EIGHT: School/community resources must be coordinated to benefit students.

NINE: Adequate financial support for education is essential.

Principles one through five, seven and eight are consistent with the general principles of Goals 2000. Principles six and nine are valid issues of concern but are more appropriately addressed at the State and local levels. Challenging students with high expectations and high standards, involvement by parents and community members are fundamental aspects of the NEA position. The educators' are onboard with the need for and have a strategic vision of what should be included in education system reform.

C. Leadership at the State level - The Governors' Position:

The National Educational Goals Panel includes representation from all fifty states and U.S. territories. It was this body which at the Education Summit in Charlottesville, Va. developed the Six National Goals for Education which were adopted in 1990. Since then, the governors have taken up the gauntlet and passed the challenge to the local districts within their various states.

Progress has been slow, in some cases barely measurable. But, acknowledging the existence of a problem is a necessary first step to overcoming it. Each year following 1990, the NEGP has issued a detailed report of national and individual (by state) progress toward reaching each of the various goals.

Excerpts from the National Education Goals Report for 1993 provide some commentary and a few indicators supporting current criticism of our educational system. For example, in terms of meeting the six National Education Goals (outlined later in this paper) the National Report states:

"Overall this report shows that the current rate of progress is wholly inadequate if we are to achieve the National Education Goals by the year 2000.

* While increasing markedly in the early 1980s, the high school completion rate among 19- and 20- year olds has been relatively stable since then, and remains short of the national Goal of 90 percent.

* Between 1900 and 1992, the percentages of students who met the Goals Panel's performance standard in mathematics increased, but the percentages are still low--about one in five in grade four and one in four for students in grade

eight. Only one in four fourth grade students met the Goals Panel's standard in reading.

* The literacy of young adults (aged 21-25) has slipped since the mid-1980s⁷. ...average scores...were slightly lower in 1992 than the average scores of young adults seven years earlier."

The governors not only embrace the Six National Goals, they also place strong emphasis on the importance of high standards, consistent at the national level. Parental involvement and collaborative partnership involving the federal government and members of the business community are also seen as fundamental to program success. While they emphasize opposition to any form of a mandatory National Curriculum, the NEGP members are equally adamant about nationally recognized and accepted minimum standards of excellence and achievement. They see national standards as a means to attain our national education goals and the future economic prosperity implicit in such attainment.

D. Leadership from industry - The Business Perspective:
Business and industry leaders recognize all too well the linkage between education and economic competitiveness. While supporting the Six National Goals for Education, the Business Roundtable and the National Alliance of Business have developed nine

Essential Components of a Successful Education System:

1. *A successful education system operates on four assumptions:*
* *Every student can learn at significantly higher levels*

⁷ Emphasis by underlining in this section added by this writer

- * Every student can be taught successfully
- * High expectations for every student are reflected in curriculum content, though instructional strategies may vary;
- * Every student and every preschool child needs an advocate--preferably a parent.

2. A successful system is performance or outcome based.
3. A successful system uses assessment strategies as strong and rich as the outcomes.
4. A successful system rewards schools for successes, helps schools in trouble, and penalizes schools for persistent or dramatic failure.
5. A successful system gives school based staff a major role in instructional decisions.
6. A successful system emphasizes staff development.
7. A successful program provides high-quality prekindergarten programs, at least for every disadvantaged child.
8. A successful system provides health and other social services sufficient to reduce significant barriers to learning.
9. A successful system uses technology to raise student and teacher productivity and expand access to learning.

(The Business Roundtable, [BRT] Dec. 1992)

The nine elements are closely aligned with the six national education goals. They also have some additional specificity which I personally find lacking in the goals themselves. Corporate America is clearly concerned -- and more importantly -- engaged in the process of improving our nation's educational system. As seen in the December 1992 publication, the Business Roundtable cites numerous examples of successful and ongoing projects in a variety of states in every region of the country.

In 1989 the BRT announced a 10 year commitment to educational improvement. The more than 200 corporate members, representing

some 10 million employees developed the nine components previously listed and agreed to work with state and local education leaders to effect changes. (BRT, Agents of Change) Another organization, the National Alliance of Business (NAB), established in 1968, has long been actively engaged as a facilitator linking public and private sectors to bring the nation's disadvantaged into the mainstream in education and employment.

The National Association of Partners in Education, Inc. (NAPE) is another private sector organization engaged in improving our educational system. This organization facilitates programs to connect schools with groups offering assistance. NAPE has more than 2.6 million volunteers involved in some 200,000 partnerships nationwide. (NAPE 1993)

E. The Case for Business Involvement: Why should business expend time and effort on improving the national system of education? After all, as good corporate citizens business already contributes substantial amounts of tax dollars into the coffers of government. We are still the most productive nation on the planet. What is it that compels business to become concerned and engaged with a passion that is historically unprecedented?

Changing demographics is the primary fuel for the new fire driving the engine of business engagement in educational reform. Only 15% of new workers entering the work force of 2000-2005 will

be white males. The rest will be white women, members of minority groups, or immigrants. (Fullerton, 1993) As I indicated earlier, many of these groups are under-served by our present system of education.

At the same time, the mix of available jobs -- and the skills needed to perform them -- is changing. Today's jobs are increasingly demanding. All but the lowest paying jobs, with the least opportunity for advancement, will require skills historically absent in the traditional worker. The service producing sector is expected to contribute 24 million of the 25.1 million projected increase in nonfarm wage and salary jobs. Most of this growth will be in health and business services. (Franklin, 1993)

Manufacturing, overall, is expected to lose some 500 thousand jobs. Manufacturing output, however, is expected to grow. The workers will have to be even more productive than they are today. (Franklin, 1993) "The value of unskilled labor is rapidly disappearing." Absent swift and profound improvements to our educational system, business will be chasing a shrinking pool of qualified workers for an expanding set of jobs requiring complex skills. (Donley and Martin, 1992)

What the private sector is seeking is "a worker that has learned how to learn." (Nielsen, 1990) Businesses are seeing and suffering from the costs of "educating rather than training" their

entry level workers. American businesses currently spend hundreds, in some cases thousands, of dollars to train workers. Remedial education makes up the lion's share of this cost. By comparison, our Japanese, and by inference other foreign, competitors spend only a few dollars to bring their workers up to the same skill level. (Gordon, 1990)

The case for corporate involvement is clearly analogous to the "Mr. Goodwrench" case. You can pay now, or you can pay later. Later inevitably costs more. Investing time and money now in school system improvement can save substantially more time and money later. The increased social consciousness seen in today's corporations may well be simply a recognition of the potential economic impact of corporate involvement or disengagement.

VI. ANALYSIS

The assumptions underlying the imperative for educational reform seem reasonable and well supported by the literature I reviewed. There was little evidence of dissenting voices proclaiming that there is no problem with our educational system. The linkage between economic prosperity, industrial competitiveness and a strong educational system is likewise mentioned directly or is implicit in many of the references.

The goals and concerns, strategic vision or issues cited by the various interest groups have a great deal of similarity. As strategic concepts at a national or state level, they have the necessary broadness of scope and avoid "getting too far down into the weeds." At the same time, their very generality is an impediment to understanding what is meant and how one gets there. As counter to this concern, several sources cited listings of successful programs as being available from a variety of sources.

The framework I developed and discussed includes the major participants/stakeholders in the reform effort. I am assuming that concerns of educators, at all levels, will be appropriately addressed and communicated by representative groups such as the National Teachers Association, National Education Association, etc. There seems to be an absence of data on concerns of organized parent groups. This may be due to the lack of involvement on the part of many parents for a variety of reasons.

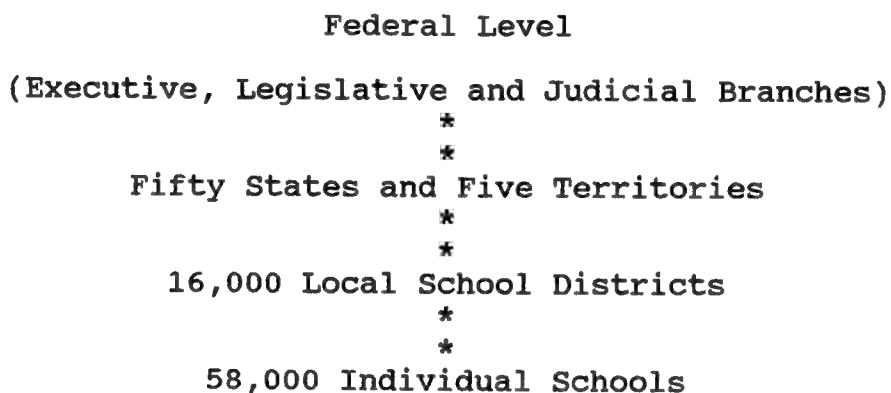
Parental involvement is perhaps the most important of the stakeholder issues. Although a recurrent theme throughout the reform plans, few details are offered on how this will be achieved. Secretary of Education Riley indicated the vital link between parental involvement and academic success for our children. (Riley, Feb 16, 1994) What is less clear, is what will be done for the "at risk" students whose parents do not or cannot care because they are (a) absent, (b) drug addicts, (c) kids raising kids or (d) otherwise victims of an educational and social support system which failed to provide them with the tools necessary to lead a productive life.

Curriculum standards represent a key component of the entire reform process. On the one hand, there is little congressional support for a nationally mandated curriculum or a nationally imposed set of measurements linked to penalties for failure to meet standards. At the same time, there is general agreement of the need to determine, at a national level, what it is that we should expect our schools to teach and our children to learn. There is more controversy associated with this issue than with most of the remainder of the Goals 2000 plan. Except for some potentially legitimate concerns about Federal intrusion into what is a State's Rights arena, and the debate over school choice (some public funding for some private schools) the participants seem to be "singing from the same sheet of music." Achieving harmony within the melody of reform remains a significant and ongoing challenge.

VII. CONCLUSIONS

I offer conclusions in the form of answers to some of the questions I developed as I examined the issue of educational reform:

Why is educational reform so complex? The following diagram provides an illustrative answer to the question of complexity:



Given the tradition and constitutional foundation of local control, reform encompasses up to 58,000 separate players and programs. The interests of these elements of the educational system must not only be considered; but in many cases they must also be accommodated.

Does a significant problem exist? Although there are some naysayers who deny that there is a major problem with our educational system, most would agree there is a strong need for

major, systemic changes. The evidence is irrefutable and present in large quantity. Our schools are not providing the output needed for successful entry into the present and future workplace, or post-secondary education programs. There is a problem. Not just in the schools in other people's neighborhoods, but across the nation. The problem is systemic and it needs to be fixed now.

What about Goals 2000? With politics being the "art of the possible" the goals are appropriate and sufficiently strategic to gain broad based support. Specific details of implementation still need to be worked out. There is still much that is unclear in terms of means to be employed in achieving the goals.

At current rate(s) of progress, will we reach the goals by the year 2000? The National Education Goals Panel stated that it was unlikely that we would reach the stated goals at the current rate of progress. This does not mean, however that we should cease efforts and lament the situation. Progress is being made, albeit slowly. As more details are worked out, we could well see an increase in the rate of change.

Why can't the Federal Government simply mandate the new standards and force the needed changes on the states by threatening to withhold federal funds for education? This was done with the 55 mph speed limit and federal highway funds. Unlike highway funding, the Federal government only contributes a small amount to the total

funding for education. From a high of about 8.5% in 1975-76, current Federal expenditures for public, elementary and secondary education amounts to only about 6% of the total. This percentage is too small to use as a "lever" to force compliance by the states.

What should the Federal Government's role be then? Providing leadership, taking the case and need for educational reform to the American people is the best role. Acting as a facilitator, bring together leaders in business, education and government to work out the details of how to best go about improving our educational system is an appropriate and politically do-able role.

What about state and local involvement? The various states and local districts must accept their responsibility to their citizens and the nation. Although educational reform may be accomplished in many ways, it will take effort and commitment of time, energy and resources no matter what course of action is selected.

Should Business remain part of the process? Businesses can, indeed must, remain engaged as advisors, as partners in school improvement and as evaluators of the "product" submitted to the nation by our schools. The increased dialogue and involvement has been beneficial to all parties and has provided a synergy wherein the results have often been greater than the sum of the parts.

What about the parents? Parents must become involved to a much greater degree that is currently experienced. A total learning experience, especially concerns about building good citizens and positive values cannot be delivered in six hours per day at school. Unless parents or other advocates become partners in educational improvement it will be extremely difficult, if not impossible, to improve educational achievement levels for the majority of our students. How to accomplish this is a challenge that must be successfully met. The role of the Federal government in making the case for such action cannot be overemphasized.

Are we on target or off course? While I am not convinced that we are truly "zeroed in" on the bullseye, I believe that we are moving in the right direction. The slow pace of reform can be frustrating; but, like an ocean liner, once it's travelling at full speed ahead, it becomes difficult to make significant course changes. The caution shown by the present administration may not be ill-advised. Secretary Riley, President Clinton, et.al. might do well to consider the primary tenet of the Hippocratic Oath which is "First, do no harm."

Can we get there from here? YES! It will take time, effort and a long term commitment on the part of all participants. The desire for "instant pudding" solutions or "silver bullets" will have to be constantly guarded against. If simple solutions existed, they would already have been found and implemented.

SOURCES CONSULTED:

Barbara S. Allen (May 1991). Executives in education, Business education forum, 12-13.

Bernard Avishai (January-February 1994). What is businesses social compact?, Harvard Business Review, 38-48.

Don M. Blandin (February 15 1992). Help wanted: crisis in the work force, Vital Speeches of the Day, 281-284.

Jack E. Bowsher (1989). Educating America: lessons learned in the nation's corporations, John Wiley & Sons, Inc., New York

The Business Roundtable (1993). The essential components of a successful education system: Putting policy into practice. Washington, D.C.

The Business Roundtable (undated). Agents of Change: exemplary corporate policies and practices to improve education. Washington, D.C.

Congressional Digest (January 1994)

Alice Digilio (August 7 1988). The private sector and the public schools, The Washington Post, book world, 8-10.

Edward Donley and Robert L. Martin (1992). Preparing tomorrow's workforce: a challenge of unparalleled complexity, Business Forum, Winter 1992, 6-8.

C. Emily Feistritzer (August 7 1988) Will American workers be ready for the 21st century?, The Washington Post Education review, 11-13.

James C. Franklin (1993). Industry output and employment, Monthly Labor Review Bureau of Labor Statistics, November, 1993, 41-57.

Tom Garcia (April-May 1993). Education: getting down to business, Executive Speeches, 32-35.

Jack Gordon (20 August 1990). Can business save the schools?, Training, 19-27.

Kerry Hannon (1 November 1993). No bachelor's degree needed, U.S. News and World Report, 99-101

Jim Hight (February 1991). Reading, writing and rescue: companies look to help themselves by helping New England's schools, New England Business, 20-24.

Hudson Institute (1987). Workforce 2000: work and workers for the 21st century, Indianapolis, In.

William F. Lauber (November 16 1993). Goals 2000: The Washington knows best approach to school reform, The Heritage Foundation Issue Bulletin, Nr 185, pgs 1-10.

Michael R. Losey (February 1992). The crisis in education is our problem, Modern office technology, 46-47.

Larry Martz (1992). Making Schools Better: how parents and teachers across the country are taking action--and how you can, too. Times Books, New York

Joseph F. McKenna (September 3 1990). Two heads thinking as one, Industry Week, 93-94.

Ann McLaughlin (January 15 1992). Help wanted: crisis in the work force. Vital Speeches of the Day, 217-220.

National Association of Partnerships in Education (1993). Nape Overview, Alexandria, Va.

National Commission on Excellence in Education (April 1983). A NATION AT RISK, 5-37.

National Education Association [NEA] (undated). An open letter to America on schools, students and tomorrow

National Education Goals Panel (1993). The National Education Goals Report, Summary Guide, pgs 2-18, Washington, D.C., U.S. Government printing office

National Education Goals Panel (1993). The National Education Goals Report, Volume One: The National Report, pgs 2-203, Washington, D.C., U.S. Government printing office

National Education Goals Panel (1993). The National Education Goals Report, Volume Two: State Reports, pgs 2-225, Washington, D.C., U.S. Government printing office

Laura A. Nielsen (ed) August 1990). Training today's workforce for tomorrow: corporate involvement in training and education--the key to upgrading the U.S. work force.

Martha H. Peak and Karen Matthes (March 1992). Lessons out of school: the German benchmark in training, Management Review, 54-56.

Nancy Ramsey (November 16 1992). How business can help the schools, Fortune, 147-174.

Diane Ravitch, (Dec 1992). National Standards and curriculum reform: A view from the Department of Education, National Association of Secondary School Principals [NASSP] Bulletin, Vol 76 No 548, p24-29.

Richard Riley and William Galston, (1993). Press Briefing by Education Secretary Riley and Deputy Assistant to the President for Domestic Policy, William Galston, The White House, February 3, 1994, accessed through COMPUVERSE

Richard Riley (Feb 16, 1994). Family involvement said key to education, Potomac News, Manassas, Virginia, A-9.

Albert Shanker, (1993). Restoring the Academic Mission of the School, Vital Speeches of the Day, VOL. LIX, No 22, 1 Sep 1993, 674-682.

Joan C. Szabo (February 1992). Schools for the 21st century, Nation's Business, 22.

Joan C. Szabo (October 1991). Schools that work, Nation's business, 20-28.

Frank Swoboda (September 3 1990). Trying to bridge the job-skills gap, The Washington Post the Federal Page.

Lillie Taylor (May 1991). Involving the business community in improving education, Business Education Forum, p7-9.

Gerald Unks (1993). Three Nation's curricula: what can we learn from them?, National Association of Secondary School Principals [NASSP] Bulliten, Vol 76 No 548, p30-47.

U.S. Department of Education, (1991). America 2000, an education strategy, Washington, D.C.

U.S. Department of Education, National Center for Education Statistics, (1993). The Condition of Education, 1993. Washington, D.C.

Alfred S. Warren Jr. (Winter 1990). Creating a competitive workforce, Economic development review, 10-12.